

## ABSTRACT:

A device for the inspection of one or more movable surfaces (8), more in particular for the inspection of a rotating surface (8) of a wafer, which device includes at least one light source (1), notably a laser light source, and a beam splitter (4) for splitting a light beam that is emitted by said laser light source into at least one reference beam (6) that is applied to a detector (16) and at least one measuring beam (5) that is applied to the surface (surfaces) and contains at least one component in the direction of movement (U) of the respective surface or in the opposite direction, the light (15) that is reflected by the surface (8) having, upon detection of a defect (14), a frequency ( $v'$ ) that has been shifted relative to the measuring beam (5) and on which the reference beam (6) can be superposed. The device includes an evaluation unit (29) for determining the velocity (v) of a defect (14) on the surface (8) from the shifted frequency ( $v'$ ) and for determining the position of the defect on the surface therefrom.

Fig. 1

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